

S/N 10/518,864

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Please amend claims 1 and 13, and add new claim 20, as follows:

Listing of Claims:

1 (Currently Amended). A method of removing moisture from a material comprising the steps of:

heating a first, nitrogen-depleted stream of gas using a heater, the first stream of gas being atmospheric air from which at least a proportion of the nitrogen present therein has been removed, to thereby increase the percentage by volume of oxygen in the first stream of gas;

passing said stream of heated gas through a dryer, to extract moisture from said material contained within the dryer;

returning a first portion of the used gas, which constitutes a second stream of gas, from an outlet of the dryer to the heater;

re-heating the second stream of gas in the heater; and

passing the heated second stream of gas back into the dryer. dryer,

~~wherein the first stream of gas is atmospheric air from which at least a proportion of the nitrogen present therein has been removed, to thereby increase the percentage by volume of oxygen in the first stream of gas.~~

2 (Original). A method as claimed in claim 1, wherein at least 50% of the nitrogen normally present in atmospheric air is removed.

3 (Original). A method as claimed in claim 2, wherein at least 97% of the nitrogen normally present in atmospheric air is removed.

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4 (Previously Presented). A method as claimed in claim 1, wherein a proportion of the nitrogen normally present in atmospheric air is removed resulting in the first stream of gas containing between 90% and 99% oxygen.

5 (Original). A method as claimed in claim 4, wherein a proportion of the nitrogen normally present in atmospheric air is removed resulting in the first stream of gas containing 90% oxygen.

6 (Previously Presented). A method as claimed in claim 1, further comprising the step of expelling a second portion of the used gas at or above atmospheric pressure through a heat recovery system before gas treatment and/or exhaust to the atmosphere.

7 (Previously Presented). A method as claimed in claim 1, further comprising the step of expelling the remaining portion of the used gas into the atmosphere as an exhaust stream.

8 (Previously Presented). A method as claimed in claim 1, wherein the nitrogen is removed from the atmospheric air by means of a molecular sieve.

9 (Previously Presented). A method as claimed in claim 1, wherein the nitrogen is removed from the atmospheric air by means of a membrane filtration system.

10 (Previously Presented). A method as claimed in claim 1, wherein the nitrogen is removed from the atmospheric air cryogenically.

11 (Previously Presented). A method as claimed in claim 1, wherein the material to be dried is continuously fed through the dryer.

12 (Original). A method as claimed in claim 11, wherein the material to be dried is particulate matter which is held in suspension in the dryer and is intimately mixed with the drying gas.

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13 (Currently Amended). A drying apparatus for drying material containing moisture, comprising

a supply of nitrogen-depleted drying gas, which is atmospheric air from which at least a proportion of the nitrogen present therein has been removed, to thereby increase the percentage by volume of oxygen in the drying gas, said nitrogen-depleted drying gas constituting a first stream of gas;

a heater for heating the first stream of gas;

a dryer operatively connected to the heater through which the heated first stream of gas is passed for the purposes of removing moisture from said material; and

a conduit for circulating a first portion of the used stream of gas, which constitutes a second stream of gas, back into the heater to be re-heated.

14 (Original). An apparatus as claimed in claim 13, wherein the first stream of gas used to remove moisture from the material is atmospheric air having had at least 50% of the nitrogen normally present therein removed therefrom.

15 (Previously Presented). An apparatus as claimed in claim 13, wherein the first stream of gas used to remove moisture from the material is atmospheric air having had a proportion of the nitrogen normally present therein removed therefrom such that the first stream of gas contains between 90% and 99% oxygen.

16 (Previously Presented). An apparatus as claimed in claim 13, further comprising an exhaust component for expelling the remaining portion of the used gas into the atmosphere as an exhaust stream.

17 (Previously Presented). An apparatus as claimed in claim 13, further comprising a fluid pump for ensuring movement of the gas stream and the used gas about the drying apparatus.

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18 (Previously Presented). An apparatus as claimed in claim 13, further comprising a heat recovery system for removing heat from a second portion of the used stream of gas, which constitutes a third stream of gas, to form a fourth stream of gas.

19 (Original). An apparatus as claimed in claim 18, further comprising a gas cleaner for cleaning the fourth stream of gas.

20 (New). A drying apparatus for drying material containing moisture, comprising a supply of nitrogen-depleted drying gas, which is atmospheric air from which at least fifty percent (50%) of the nitrogen present therein has been removed, to thereby increase the percentage by volume of oxygen in the drying gas to between ninety percent (90%) and ninety-nine percent (99%), said nitrogen-depleted drying gas constituting a first stream of gas;

a heater for heating the first stream of gas;

a dryer operatively connected to the heater through which the heated first stream of gas is passed for the purposes of removing moisture from said material; and

a conduit for circulating a first portion of the used stream of gas, which constitutes a second stream of gas, back into the heater to be re-heated.